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# Meta-Analysis of Environmental Kuznets Curve Studies: Determining the Cause of the Curves Presence

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Oral Presentation O11.4

**META-ANALYSIS OF ENVIRONMENTAL KUZNETS CURVE STUDIES:  
DETERMINING THE CAUSE OF THE CURVES PRESENCE**

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This investigation uses meta-analysis to explore the systematic variation across Environmental Kuznets Curve (EKC) studies to better understand the specific factors that affect the relationship between economic growth and environmental quality. Meta-analysis is the statistical synthesis of data from a set of comparable studies of a problem yielding a quantitative summary of pooled results. Following the findings of Li et al. (2007), a multinomial logit model is employed to analyze 929 observations from 120 different studies published between 1992 and 2012. Results indicate that seven variables (sulfur dioxide, number of observations, emission, global factor, time, level of development, and publication date) significantly affect the presence of the EKC. There is not statistically significant evidence showing increased or decreased probability of finding an EKC from carbon dioxide, nitrogen oxide, GDP measures, pollution activity source, or panel data.